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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/419,849 | 10/19/1999 | NIKOLAI M. KRIVITSKI | 86017.000010 | 1900 |
| 23387 | 7590 | 04/29/2004 | EXAMINER | |
| Stephen B. Salai, Esq. Harter, Secrest & Emery LLP 1600 Bausch & Lomb Place Rochester, NY 14604-2711 | | | PATEL, HARSHAD R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2855 | |

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 09/419,849 | Applicant(s) KRIVITSKI ET AL. | |
| | Examiner Harshad Patel | Art Unit 2855 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 19 February 2004.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-38 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-38 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____. |
|--|--|

Response to Arguments

1. In view of the appeal brief filed on 2/19/04, PROSECUTION IS HEREBY REOPENED.

A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

The argument that the prior art does not teach an initial flow rate of the liquid is not persuasive. However, any such device that introduces a tracer element within the flow rate determines nothing more than an initial flow rate of the flowing medium. The tracer is added to measure the flow rate of the flowing medium. By adding the tracer one having ordinary skill in the art would determine the initial flow rate of the medium. It does not require a specific explanation to indicate the initial flow rate.

Claim Rejections - 35 USC § 112

3. Claim 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 34 refers to the phrase "measuring to identify", it is unclear as to what is being measured to identify one of the known volume and time.

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Claim 35 refers to “determining the known flow rate by measuring”. It is unclear as to by measuring what is the known flow rate being determined.

Claim 36 refers “to determining the known volume and time by measuring”. It is unclear as to by measuring what is the known volume and time being determined.

Claim 38, it is unclear as to an introduced flow rate of what is the applicant referring to.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 7-10, 20-22, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Prachar (3,881,351).

Prachar teaches a method and apparatus for measuring the initial mass flow rate of a constituent (liquid) in the gaseous stream in a conduit (10) comprising injecting a discrete known volume over a known time to the initial flow rate (col. 1, lines 60-63), sensing a corresponding resulting change in the flow in the conduit (col. 1, lines 31-37); and determining the initial flow rate in response to the introduced known volume, the known time and the sensed resulting change. The resulting change includes sensing at and upstream location (12) and downstream location (28) of the introduced volume and wherein the sensor being located within the conduit. As to the sensing a corresponding resulting change including various sensing criteria is nothing more than an inherent characteristic of the fluid being measured and such characteristics being measured depend on the type and method the tracer is introduced. The controller is nothing more than an electronic device, which would be an inherent and necessary element in which such computation is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 11-19, 23, 24, 26-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prachar.

Prachar teaches all the claimed features of the instant invention except for specific environment in which the device is employed. In the instant application, the device is used in combination with a catheter to inject a specific type tracer within the blood. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a known device of Prachar in the medical field environment to measure the blood flow rate since such flow rate are necessary for a patient's health issues and for that a specific type of tracer is to be used. It would be obvious to a medical field operator to use such known chemicals so the patient does not have any side effects due to such introduction. As to the relationship described in claim 37, Prachar teaches that any known expressions may be used to come to a solution (col. 2, lines 65-68). Thus it is nothing more than experimental knowledge to derive any formula for achieving a result.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hall (4,807,469) teaches an initial flow rate of mud in a drilling operation by introducing a tracer.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad Patel whose telephone number is (571) 272-2187. The examiner can normally be reached on Monday-Thursday (7:00 AM-5:30 PM).



Harshad Patel
Primary Examiner
Art Unit 2855

hp
April 26, 2004